

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed October 23, 2007. Claims 1-24 remain pending in the present application. Reconsideration and allowance of the application and the presently pending claims are respectfully requested.

Response to Rejection of Claims under 35 U.S.C. § 103

Claims 1-24 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Lamming* (U.S. Patent No. 6,922,725) in view of *Hitaka* (U.S. Patent No. 7,145,679 B2).

a. Claim 1

As provided in independent claim 1, Applicants claim:

A method for printing information at a remote location, comprising:
establishing a network connection at a remote location;
receiving a list of printing devices communicatively coupled to a print service available to a mobile-computing device;
requesting a print device context responsive to a printer selected from the list of printing devices;

using an application resident on the mobile-computing device to render information to the print device context, wherein the application generates a plurality of device commands responsive to the information to be printed; and

forwarding the device commands to the print service, wherein the print service renders the device commands against the printer.

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Lamming* in view of *Hitaka* does not disclose, teach, or suggest at least "using an application resident on the mobile-computing device to render information to the print device context, wherein the application generates a plurality of device commands responsive to the information to be printed; and forwarding the device commands to the print service, wherein the print service renders the device commands against the printer," as emphasized above.

For example, *Lamming* describes a processing for processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printed. The “document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists.” See col. 10, lines 46-60. As such, *Lamming* fails to teach or suggest “using an application resident on the mobile-computing device to render information to the print device context, wherein the application generates a plurality of device commands responsive to the information to be printed; and forwarding the device commands to the print service, wherein the print service renders the device commands against the printer,” as recited in claim 1.

Further, *Hitaka* describes a print shop ordering process where a client PC 100 uploads a document to a center server 120, which converts the document to a printer description language file format, such as a PDF format, that is transferred along with print set information (e.g., paper size, printer name, number of copies, etc.) as a print order to a print shop. The print shop completes the necessary operations to produce a printed document. See, e.g., col. 12, lines 28-64. As such, *Hitaka* individually or in combination with *Lamming* fails to teach or suggest “using an application resident on the mobile-computing device to render information to the print device context, wherein the application generates a plurality of device commands responsive to the information to be printed; and forwarding the device commands to the print service, wherein the print service renders the device commands against the printer,” as recited in claim 1. Rather, *Hitaka* describes that a print shop and not a mobile device nor the central service generates device commands responsive to information to be printed.

As a result, claim 1 is patentable over *Lamming* in view of *Hitaka*, and the rejection should be withdrawn.

b. Claims 2-5

Claim 1 is allowable over the cited art of record for at least the reasons given above. Since claims 2-5 depend from claim 1 and recite additional features, claims 2-5 are allowable as a matter of law over the cited art of record.

c. Claim 6

As provided in independent claim 6, Applicants claim:

A computer-readable medium having stored thereon an executable instruction set, the instruction set, when executed by a processor, directs the processor to perform a method comprising:

sensing a change of connection status between a mobile-computing device and a wireless access device coupled to a local area network;

establishing a communication session with a print service accessible via the local area network when the change of connection status indicates that the mobile-computing device has established a communication session with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a designated printer coupled to the print service;

using the printer driver to intercept graphics device commands generated by an application operative on the mobile-computing device; and

forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands against the designated printer.

(Emphasis added).

Applicants respectfully submit that independent claim 6 is allowable for at least the reason that *Lamming* in view of *Hitaka* does not disclose, teach, or suggest at least “establishing a communication session with a print service accessible via the local area network when the change of connection status indicates that the mobile-computing device has established a communication session with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a designated printer coupled to the print service; using the printer driver to intercept graphics device commands generated by an application operative on the mobile-computing device; and

forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands against the designated printer," as emphasized above.

For example, *Lamming* describes a processing for processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printed. The "document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists." See col. 10, lines 46-60. As such, *Lamming* fails to teach or suggest "establishing a communication session with a print service accessible via the local area network when the change of connection status indicates that the mobile-computing device has established a communication session with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a designated printer coupled to the print service; using the printer driver to intercept graphics device commands generated by an application operative on the mobile-computing device; and forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands against the designated printer," as recited in claim 6.

Further, *Hitaka* describes a print shop ordering process where a client PC 100 uploads a document to a center server 120, which converts the document to a printer description language file format, such as a PDF format, that is transferred along with print set information (e.g., paper size, printer name, number of copies, etc.) as a print order to a print shop. The print shop completes the necessary operations to produce a printed document. See, e.g., col. 12, lines 28-64. As such, *Hitaka* individually or in combination with *Lamming* fails to teach or suggest "establishing a communication session with a print service accessible via the local area network when the change of connection status indicates that the mobile-computing device has established a communication session with the wireless access device, wherein during the

communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a designated printer coupled to the print service; using the printer driver to intercept graphics device commands generated by an application operative on the mobile-computing device; and forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands against the designated printer," as recited in claim 6. Rather, *Hitaka* describes that a print shop and not a mobile device nor the center server generates device commands responsive to a print service. Further, *Hitaka* describes that a center server converts a document into a printer description language file and does not disclose that a mobile-computing device uses a print driver to generate a generic device context.

As a result, claim 6 is patentable over *Lamming* in view of *Hitaka*, and the rejection should be withdrawn.

d. Claims 7-14

Claim 6 is allowable over the cited art of record for at least the reasons given above. Since claims 7-14 depend from claim 6 and recite additional features, claims 7-14 are allowable as a matter of law over the cited art of record.

e. Claim 15

As provided in independent claim 15, Applicants claim:

A mobile-computing device, comprising:
means for responding to a change of connection status between a mobile-computing device and a wireless access device communicatively coupled to a print service;

means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service;

means for intercepting graphics device commands generated by an application operative of the mobile-communication device; and

means for forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands in accordance with the printer.

(Emphasis added).

Applicants respectfully submit that independent claim 15 is allowable for at least the reason that *Lamming* in view of *Hitaka* does not disclose, teach, or suggest at least "means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service; means for intercepting graphics device commands generated by an application operative of the mobile-communication device; and means for forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands in accordance with the printer," as emphasized above.

For example, *Lamming* describes a processing for processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printed. The "document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists." See col. 10, lines 46-60. As such, *Lamming* fails to teach or suggest "means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service; means for intercepting graphics device commands generated by an application operative of the mobile-communication device; and means for forwarding

the graphics device commands to the print service, wherein the print service renders the graphics device commands in accordance with the printer," as recited in claim 15.

Further, *Hitaka* describes a print shop ordering process where a client PC 100 uploads a document to a center server 120, which converts the document to a printer description language file format, such as a PDF format, that is transferred along with print set information (e.g., paper size, printer name, number of copies, etc.) as a print order to a print shop. The print shop completes the necessary operations to produce a printed document. See, e.g., col. 12, lines 28-64. As such, *Hitaka* individually or in combination with *Lamming* fails to teach or suggest "means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service; means for intercepting graphics device commands generated by an application operative of the mobile-communication device; and means for forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands in accordance with the printer," as recited in claim 15. Rather, *Hitaka* describes that a print shop and not a mobile device nor the center server generates device commands responsive to a print service. Further, *Hitaka* describes that a center server converts a document into a printer description language file and does not disclose that a mobile-computing device uses a print driver to generate a generic device context.

As a result, claim 15 is patentable over *Lamming* in view of *Hitaka*, and the rejection should be withdrawn.

f. Claims 16-20

Claim 15 is allowable over the cited art of record for at least the reasons given above. Since claims 16-20 depend from claim 15 and recite additional features, claims 16-20 are allowable as a matter of law over the cited art of record.

g. Claim 21

As provided in independent claim 21, Applicants claim:

A mobile-computing apparatus, comprising:
a processor;
a memory coupled to the processor having stored therein a driver comprising:
a communication interface including:
an application interface for communicatively coupling the driver to an application executing within the processor; and
a print service interface for communicatively coupling the driver to a print service wirelessly coupled to the mobile-computing apparatus;
an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and
a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service.

(Emphasis added).

Applicants respectfully submit that independent claim 21 is allowable for at least the reason that *Lamming* in view of *Hitaka* does not disclose, teach, or suggest at least a mobile-computing apparatus comprising "an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service," as emphasized above.

For example, *Lamming* describes a processing for processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printed. The "document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists." See col. 10, lines 46-60.

As such, *Lamming* fails to teach or suggest a mobile-computing apparatus comprising “an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service,” as recited in claim 21.

Further, *Hitaka* describes a print shop ordering process where a client PC 100 uploads a document to a center server 120, which converts the document to a printer description language file format, such as a PDF format, that is transferred along with print set information (e.g., paper size, printer name, number of copies, etc.) as a print order to a print shop. The print shop completes the necessary operations to produce a printed document. See, e.g., col. 12, lines 28-64. As such, *Hitaka* individually or in combination with *Lamming* fails to teach or suggest a mobile computing apparatus comprising “an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service,” as recited in claim 21. Rather, *Hitaka* describes that a print shop and not a mobile device nor the center server generates device commands responsive to a print service. Further, *Hitaka* describes that a center server converts a document into a printer description language file and does not disclose that a mobile-computing device renders information desired to be printed to an intermediate format communicated to the print service.

As a result, claim 21 is patentable over *Lamming* in view of *Hitaka*, and the rejection should be withdrawn.

h. Claims 22-24

Claim 21 is allowable over the cited art of record for at least the reasons given above. Since claims 22-24 depend from claim 21 and recite additional features, claims 22-24 are allowable as a matter of law over the cited art of record.

CONCLUSION

For at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,



Charles W. Griggers
Reg. No. 47,283